The Most Reliable Portable Printers®

MICROFLASH 4T

User's Guide

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microFlash 4t Printer: Top View

Figure 1

Installing a Radio Card

Note: The following information applies to printers with radio capabilities.

Caution: Before installing the radio card, verify the red, battery isolator labels are in place or remove the batteries before installing the radio card.

1. Remove the radio card cap (Figure 2).
2. With the logo facing down, insert the radio card between the foam and the radio card strap (Figure 3).

Figure 2

Figure 3

3. Carefully push the card into the connector until it is fully seated (Figure 4).

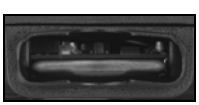

Figure 4

4. Replace the radio card cap.
5. For information on configuring the radio, see *Configuring the Printer on page 10*.
6. Install the batteries. For more information, see *Installing and/or Replacing Batteries on page 6*.

Using Batteries: General Guidelines

- If your printer came with batteries already installed, remove the red, battery isolator labels. If your printer did not come with batteries installed, see *Installing and/or Replacing Batteries on this page*.
- If you are storing your printer for a long period of time, reinstall the battery isolator labels.
- Both batteries must be installed for your printer to operate properly.

Installing and/or Replacing Batteries

1. Open the printer's cover (Figure 5).
2. If applicable, remove the batteries by pressing the retainer clip outward with your thumb (Figure 6).

Figure 5

Figure 6

3. While pressing the retainer clip, lift the outside end of the battery past the retainer clip.
4. Insert or replace the new batteries. Verify the battery contacts are facing down and are on the outside edge of the printer (Figure 7).

Figure 7

Charging the Battery

To charge the battery, you must first remove the red, battery isolator labels.

If the battery is low when the printer “wakes up,” the printer sounds three short beeps. Plug the AC Adapter into an appropriate power source. The Charge LED turns red when charging and turns green when fully charged. (For more information on the Charge LED, see *Using Buttons, LEDs, and Audio Indicators on page 12*.) A complete charge takes approximately 2 to 4 hours.

Caution: To obtain full battery capacity, a new battery must cycle through two to three charges. To restart a charge, unplug the power cord. Wait 30 seconds, then replug the power cord.

Determining Battery Condition

To determine the battery’s condition, print a self-test. For more information, see *Printing a Self-Test on page 10*. The battery voltage varies between 6.2 and 8.4 volts.

Installing Paper

1. Insert a roll of paper with the end of the roll exiting from the bottom of the paper cavity (Figure 8).
2. Open the print head by raising the gray, print head release lever until it is fully open. Do not stop at the partial open position (Figure 9).

Figure 8

Figure 9

3. Wake up the printer by briefly pressing the red, self-test button (Figure 10).
4. Feed the end of the paper under the roller. The paper automatically feeds under the roller and exits the top of the print head. Verify the paper exits the print head straight (Figure 11).

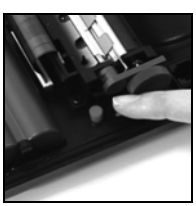

Figure 10

Figure 11

5. Lower the gray, print head release lever (Figure 12).
6. Feed the paper through the printer's cover (Figure 13).

Figure 12

Figure 13

7. Close and latch the printer's cover.

Printing a Self-Test

1. After installing the paper, open the printer's cover.

Caution: If the red, battery isolator labels are installed, remove them.

2. Press and hold the red, self-test button for approximately five seconds until printing begins.
3. After printing begins, release the red, self- test button.

Configuring the Printer

The printer has many configurable settings. To configure or upgrade firmware, download the Windows configuration program at www.oneilprinters.com.

Using Printer Data Cables

1. Select the appropriate cable for use with the host and/or device you are using.
2. Insert the plug into the printer's data port (Figure 14).

Figure 14

3. Lead the cable through the notch on the outside of the printer's cover.
4. With the cable exiting the front of the printer, close and latch the printer's cover.

Using 802.11b/Bluetooth

Note 1: The following information applies to printers with 802.11b/Bluetooth capabilities.

Note 2: Use only authorized 802.11b radio cards in O'Neil printers. For information on authorized 802.11b radio cards, contact O'Neil Product Development at (949) 458-0500.

Radio printers are configured with default factory settings. To determine your printer's radio configuration, print a self-test. (For more information, see *Printing a Self-Test on page 10*.) If you have multiple printers, configure them specifically for use in your environment.

For proper system operation, set the following parameters on your printer and host computer:

802.11b Parameters

- ESS ID
- IP Address (if not DHCP)
- DHCP
- Sub Net Mask
- WEP Encryption
- Port
- Network Type

Bluetooth Parameters

- Device Name
- Authentication
- Bondable
- Discoverable
- Connectable
- Encryption

For information on setting parameters, see *Configuring the Printer on page 10*. Contact your network administrator to verify the proper radio settings for your environment.

Using Buttons, LEDs, and Audio Indicators

Button Functions

Red Self-Test Button	
Short press	If printer is asleep; printer wakes up. If printer is awake; paper feeds.
Long press (press and hold for five seconds)	Prints a self-test.

Blue RF (Radio-frequency) Power Button	
Short press	If printer is asleep and RF power is off; printer wakes up and RF power is turned on. If printer is asleep and RF power is on; printer wakes up and RF power is turned off. If printer is awake and RF power is off; RF power is turned on. If printer is awake and RF power is on; RF power is turned off.

LED Indicators

Blue RF Power LED Indicators

LED	Description
Blue flash - fast	RF power is on and printer is awake.
Blue flash - slow	RF power is on and printer is asleep.
Off	RF power is off.

Charge LED Indicators

LED	State of Charge	Action
Solid Red	Charge in progress.	Wait for the charge LED to turn green.
Green	Charge complete.	None.
Red flash - slow	Battery is disconnected. Battery is too cold.	Connect battery. Change environment.
Red flash - fast	High temperature.	Change environment.
Red to orange - slow	Battery voltage is very low.	Wait for solid red. Restart charge.
Red to orange flash - fast	Battery voltage is too high.	Replace battery.
Orange flash - slow	Charge timeout.	Restart battery charge.
Orange flash - fast	Internal error.	Reset printer.

CardReader LED Indicators

Magnetic

LED	Description
Green flash	Good read.
Red flash	Bad read

Smart CardReader

LED	Description
Red flash	Smart CardReader power on.
No LED	Smart CardReader power off.

Audio Indicators

Beep(s)	Description	Action
1	Printer wakes up.	None.
2	Out of paper.	Install paper.
3	Low battery.	Charge battery.
1 short	RF power is on (when blue, RF power button is pressed and power was turned off).	None.
2 short	RF power is off (when blue, RF power button is pressed and power was turned on).	None.
1 long	Boot code is starting or restarting (when downloading new firmware).	Redownload firmware.
5 short	Communication error from application.	Reset application.
8 short	CRC error in firmware.	Redownload firmware.
10 short	Error writing to communication controller firmware.	Redownload firmware.

CardReader Audio Indicators

Magnetic

Beep(s)	Description	Action
1 long	Bad read.	None
2 short	Good read.	None

Using a CardReader

Note: The following information applies to printers installed with the CardReader option.

Figure 15

General Guidelines

- To wake up the CardReader, insert a card into the CardReader slot. One short beep indicates the CardReader/printer is awake.
- If you are using a Smart CardReader, insert a card with the gold contacts facing away from the printer and leave the card in CardReader slot.
- If you are using a Magnetic CardReader, insert a card with the stripe facing toward the printer, then slowly remove the card from the CardReader slot.
- For information on CardReader LED indicators and audio indicators, see *Using Buttons, LEDs, and Audio Indicators on page 12*.

Agency Approvals

FCC Notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.
This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CE

Applicable Directive
- 89/336/EEC, 73/23/EEC

Applicable Standards
- EN55022 (1998)
- EN55024 (1998)
- EN60950 (1992)

Applicable Standards
- TS001
- AN/NZS3260

Warranty

The Company warrants that O'Neil Product Development, Inc.'s products are free from defects in manufacturing materials and workmanship for one (1) year from date of original purchase to Buyer/Distributor (OEMs 90 days from the date of purchase). Batteries, cables, power supplies, and other accessories will be warranted for ninety (90) days. O'Neil Product Development, Inc. makes no other warranties, expressed or implied, including implied warranties of merchantability and fitness of purpose.
If you try to repair, disassemble, or change the product in any way, or use parts not provided by O'Neil without prior, written authorization, all warranties are void.
For complete warranty and repair information, see the Warranty Card included in your original packaging.

Warranty Disclaimer

Customers are not required to purchase O'Neil supplies. However, for a warranty claim, if O'Neil determines that damage to the printhead or printer mechanism was directly caused by the use of non-certified or non-approved supplies, O'Neil reserves the right to hold the user responsible for all labor and material charges required for the repair.

Copyright

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Supplies

Use only supplies certified by the Original Equipment Manufacturer (OEM). For OEM supplies, please contact O'Neil at (949) 458-0500.

Media Supplies

O'Neil Product Development, Inc. offers seven certified grades of paper for use in the PrintPAD series of printers. Our certified supplies are guaranteed compatible — this important qualification means that rigorous performance and image life testing have been performed. Quality supplies are key to obtaining optimal image quality and print performance. Quality supplies are also the key to extending the life of the printer. O'Neil Product Development strongly recommends using O'Neil Certified Supplies only.

For more information, contact O'Neil Printer Supplies Group at (949) 458-6400.

Maintenance Supplies

We recommend that you follow a regular maintenance schedule using our cleaning card (or cleaning kit when using linerless labels). O'Neil's cleaning cards are designed to effectively remove dirt and other contaminants from the thermal printhead, rollers, and paper path...resulting in a clean, crisp image output — every time. Our cleaning kits remove any adhesive residue (when using linerless labels) in addition to dirt and other contaminants.

For more information, contact O'Neil Printer Supplies Group at (949) 458-6400.

For more information

For information about using the printer, contact O'Neil at (949) 458-0500, or visit wsww.oneilprinters.com.

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